

REMARKS

INTRODUCTION:

In accordance with the foregoing, claims 13, 21, 22 and 25 have been amended. Claims 13-22 and 25 are pending and under consideration.

REJECTION UNDER 35 U.S.C. §103:

Claims 13-16 and 25 are rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent 5,963,280 to Okuda et al. in view of U.S. Patent 5,808,708 to Oyama et al.

Independent claim 13 recites "a prismatic light control member provided with a great number of pairs of first and second slopes to control directivity of output illumination light is disposed along said second emission face so that said first slopes mainly receive light from said first primary light source and said second slopes mainly receive light from said second primary light source." Thus, light produced by the first primary light source is assigned to the first slope for introduction to the prismatic light control member while light produced by the second primary light source is assigned to the second slope for introduction to the prismatic light control member. An advantage of the invention of claim 13 is that light fluxes produced by one primary light source and the other primary light source can be designed to be redirected independent of each other.

It is respectively submitted that Okuda et al. and Ohyama et al. do not teach or suggest these features. Specifically, Okuda et al. employs light scattering layers as light control means for directivity modification. In FIG. 4 of Okuda et al., the scattering layers 16 can not distinguish light produced by red light source 8 from that produced by blue light source 17. The light scattering layers have no pairs of slopes of the type claimed, for example, in claim 13. Furthermore, Okuda et al. does not allow such redirection of light coming from the light sources arranged on the opposite end sides of the light guide plate combination.

With respect to Ohkawa, this reference teaches using a prismatic light control member disposed along an emission face of a single light guide plate. Therefore, Ohkawa fails to teach features of claim 13.

Accordingly, withdrawal of the rejections of claim 13, and claims 14-16 depending therefrom, is requested. Independent claim 25 is patentable over the Examiner's combination for similar reasons.

Claims 17-20 are rejected under 35 U.S.C. §103(a) as being unpatentable over Okuda et al. in view of Oyama et al. and further in view of U.S. Patent 5,997,148 to Ohkawa. Claims 21 and 22 are rejected under 35 U.S.C. §103(a) as being unpatentable over Okuda in view of Oyama and further in view of U.S. Patent 6,049,649 to Arai.

It is respectfully submitted that Ohkawa and Arai do not overcome the above deficiencies in Okuda et al. and Oyama et al.

CONCLUSION:

There being no further outstanding objections or rejections, it is submitted that the application is in condition for allowance. An early action to that effect is courteously solicited.


Finally, if there are any formal matters remaining after this response, the Examiner is requested to telephone the undersigned to attend to these matters.

If there are any additional fees associated with filing of this Amendment, please charge the same to our Deposit Account No. 19-3935.

Respectfully submitted,

STAAS & HALSEY LLP

Date: 2-21-03

By: 
Michael J. Badagliacca
Registration No. 22,729

700 Eleventh Street, NW, Suite 500
Washington, D.C. 20001
(202) 434-1500

VERSION WITH MARKINGS TO SHOW CHANGES MADE

IN THE CLAIMS:

Please **AMEND** claims 13, 21, 22 and 25 as follows:

13. (ONCE AMENDED) A liquid crystal display including a liquid crystal display panel and a surface light source device of side light type for backlighting of the liquid crystal display panel, said surface light source device comprising[;]:

a first guide plate;

a first primary light source disposed beside the first guide plate;

a second guide plate;

a second primary light source disposed beside the second guide plate; and

a driving circuit to drive the first primary light source and the second primary light source,

said first guide plate having two major faces to provide a first emission face and a first back face and having a minor face to provide a first incidence end face;

said second guide plate having two major faces to provide a second emission face and a second back face and having a minor face to provide a second incidence end face;

said first guide plate and said second guide plate being laminatedly arranged so that said second back face extends along said first emission face; and

said first incidence end face and said second incidence end face being located [oppositely] opposite to each other across said laminatedly arranged guide plates, wherein

a prismatic light control member provided with a great number of pairs of first and second slopes to control directivity of output illumination light is disposed along said second emission face so that said first slopes mainly receive light from said first primary light source and said second slopes mainly receive light from said second primary light source.

21. (TWICE AMENDED) A liquid crystal display in accordance with claim 13, wherein [said light control member is provided with a great number of] the slopes of the light control member [providing] provide inner reflection surfaces to modify a directivity of illumination output light so that illumination output light originated from any one of said first and second primary light sources is directed to a frontal direction with respect to said second emission face.

22. (TWICE AMENDED) A liquid crystal display in accordance with claim 21, wherein said light control member has an inner face provided with a great number of projection rows running approximately parallel with respect to said second incidence end face, each of said projection rows including a pair of the first and second slopes.

25. (ONCE AMENDED) A liquid crystal display comprising:
a liquid crystal display panel;
a prismatic light control member comprising a plurality of first and second slopes; and
a first light source to backlight the liquid crystal display panel, said first light source, comprising:

- a first guide plate,
- a second light source next to the first guide plate,
- a second guide plate laminated to said first guide plate,
- a third light source next to the second guide plate, and
- a driving circuit to drive the second light source and the third light source,

said first guide plate having a first emission face, a first back face and a first incidence end face,

- said second guide plate having a second emission face, a second back face extending along said first emission face and a second incidence end face,

said first incidence end face and said second incidence end face being opposite to each

other across said first and second guide plates,

said light control member being disposed along said second emission face to control a directivity of output light so that said first slopes receive light from the first light source and the second slopes to receive light from the second light source.